Claims

1. A cylinder (01) of a printing press, having at least one groove (11) extending axially underneath its surface area (09), with an actuator (26) arranged therein, wherein the actuator (26), triggered by a control signal (US) applied to it, changes its length (l26), characterized in that the actuator (26) changes its length (l26) axially in relation to the cylinder (01) and, by means of the change of its length (l26), displaces a holding device, which holds a dressing (02) on the surface area (09), over an actuating path (s) oriented axially in relation to the cylinder (01).

2. The cylinder in accordance with claim 2, characterized in that at least two dressings (02) are arranged in the axial direction.

3. The cylinder in accordance with claim 3, characterized in that an actuator (26) changes a distance between two dressings (02) over an actuating path (s) oriented axially in relation to the cylinder (01).

4. A cylinder (01) of a printing press, having at least one groove (11) extending axially underneath its surface area (09), wherein at least two dressings (02) are arranged in the axial direction of the cylinder (01) on the surface area (09), wherein at least one actuating means (26) is provided, wherein the actuating means (26) changes a distance between two dressings (02) over an actuating path

(s) oriented axially in relation to the cylinder (01), characterized in that the actuating means (26) is arranged in the groove (11) and is embodied as an electrically operable actuating means (26).

5. The cylinder (01) in accordance with claim 4, characterized in that the actuating means (26) is embodied as an electric motor (26).

6. The cylinder (01) in accordance with claim 4, characterized in that the actuating means (26) is embodied as an actuator (26).

7. The cylinder (01) in accordance with claim 6, characterized in that the actuator (26), triggered by a control signal (US) applied to it, changes its length (l26) axially in relation to the cylinder (01) and, with the change of its length (l26), changes the distance between two dressings (02) over an actuating path (s) oriented axially in relation to the cylinder (01).

8. The cylinder (01) in accordance with claim 3 or 4, characterized in that the at least one actuator (26) arranged in the groove (11), or the at least one actuating means (26) arranged in the groove (11), displaces the two dressings (02) affected by the distance change over an actuating path (s) oriented axially in relation to the cylinder (01).

9. The cylinder (01) in accordance with claim 2 or 4, characterized in that the dressings (02), whose distance from

each other was changed, are arranged next to each other on the cylinder (01).

10. The cylinder (01) in accordance with claim 2 or 4, characterized in that at least one actuator (26), or at least one actuating means (26), is assigned to each one of the dressings (02) arranged in the axial direction of the cylinder (01) on the surface area (09).

11. The cylinder (01) in accordance with claim 1 or 4, characterized in that two grooves (11), which are offset in relation to each other, are provided in the circumferential direction of the cylinder (01), wherein at least one actuator (26), or at least one actuating means (26), is arranged in each groove (11).

12. The cylinder (01) in accordance with claim 2 or 4, characterized in that at least one holding device is assigned to each dressing (02), which holds the dressing (02) on the surface area (09), wherein the actuator (26), or the actuating means (26), changes a position of the holding device holding the dressing (02) in the axial direction of the cylinder (01).

13. A printing group with a plurality of print positions, wherein a printed image is printed onto a material (24) to be imprinted, wherein in each print position cylinders (01) imprint color points for a common printed image next to or on top of each other on the material (24) to be imprinted, wherein, on its way from one print position to

a further print position following it in the printing process, the material (24) to be imprinted has a lateral extension (Q) changing transversely in relation to a production direction (P) of the cylinders (01), wherein each of the printing cylinders (01) is covered with at least one dressing (02) which prints the printed image, wherein at least one holding device maintains the respective dressing (02) on the respective cylinder (01), characterized in that the holding device is arranged in a groove (11) which extends in the axial direction of the respective cylinder (01) underneath its surface area (09) and has at least one slit-shaped opening (08) extending underneath its surface area (09), wherein the holding device holds at least one end (03, 04), which extends through the opening (08) into the groove (11), of the dressing (02) maintained on the respective cylinder (01), wherein an actuating means (26), which can be actuated by the control signal (US), is provided in the groove (11) of at least one cylinder (01), wherein the actuating means (26) displaces the holding device in the axial direction of this cylinder (01) over an actuating path (s) in such a way that dressings (02), arranged at different print positions and printing the common printed image, are adjusted in their axial position in relation to the respective cylinder (01) in such a way that the printed images printed by them agree in their axial position in spite of the lateral extension (Q) of the material (24) to be imprinted.

14. The printing unit in accordance with claim 13, characterized in that the actuating means (26) is embodied as an actuator (26).

15. The printing unit in accordance with claim 14, characterized in that, triggered by the control signal (US), the actuator (26) changes its length (l26) axially in respect to the cylinder (01).

16. The printing unit in accordance with claim 13, characterized in that the actuating means (26) causes the holding device to follow while the printing process is running.

17. The printing unit in accordance with claim 13, characterized in that the actuating means (26) is arranged in the groove (11) of a forme cylinder (01) and/or a transfer cylinder (01).

18. The printing unit in accordance with claim 13, characterized in that a linear measuring system is provided.

19. The printing unit in accordance with claim 18, characterized in that the linear measuring system is embodied as a DMS full bridge integrated into the actuating means (26).

20. The printing unit in accordance with claim 18, characterized in that the transmission of a measurement

result of the linear measuring system to a location outside of the cylinder (01) is provided.

21. The printing unit in accordance with claim 13, characterized in that the detection of the printed image or of reference markers on the material (24) to be imprinted predetermines an intended position for a print image printed at different print positions.

22. The printing unit in accordance with claim 21, characterized in that a sensor directed onto the material (24) to be imprinted detects the printed image or the reference markers on the material (24) to be imprinted.

23. The printing unit in accordance with claim 22, characterized in that the sensor is designed as an image sensor.

24. The printing unit in accordance with claim 23, characterized in that the image sensor is embodied as a CCD camera.

25. The printing unit in accordance with claim 13, characterized in that a regulating device is provided, which corrects the actuating path (s) provided by the actuating means (26) to the holding device in the axial direction of this cylinder (01) by means of a comparison with the intended position of the printed image.

26. The printing unit in accordance with claim 25, characterized in that the regulating device is arranged in a control console assigned to the printing unit.

27. A cylinder (01) in accordance with claim 1 or 4, or a printing unit in accordance with claim 13, characterized in that the control signal (US) is an electrical control signal (US).

28. A cylinder (01) in accordance with claim 1 or 4, or a printing unit in accordance with claim 13, characterized in that the actuator (26), or the actuating means (26), perform a translatory movement for displacing the holding device.

29. A cylinder (01) in accordance with claim 1 or 4, or a printing unit in accordance with claim 13, characterized in that the actuator (26), or the actuating means (26), have a structural shape wherein its length (l26) is greater than its width (b26).

30. A cylinder (01) in accordance with claim 1 or 6, or a printing unit in accordance with claim 14, characterized in that a ratio of the length (l26) of the actuator (26) to its width (b26) is greater than 2, i.e. l26/b26 > 2.

31. A cylinder (01) in accordance with claim 1 or 4, or a printing unit in accordance with claim 13, characterized

in that the actuating path (s) is between approximately 100 μm and 2 mm.

32. A cylinder (01) in accordance with claim 1 or 6, or a printing unit in accordance with claim 14, characterized in that the actuator (26) is a piezo-electrical system or a magnetostrictive system.

33. A cylinder (01) in accordance with claim 1 or 4, or a printing unit in accordance with claim 13, characterized in that the actuator (26), or the actuating device (26), can be remotely controlled.

34. A cylinder (01) in accordance with claim 1 or 4, or a printing unit in accordance with claim 13, characterized in that the actuator (26), or the actuating device (26), has a housing, which is matched to the geometry of the groove (11).

35. A cylinder (01) in accordance with claim 1 or 6, or a printing unit in accordance with claim 14, characterized in that the actuator (26) has been fitted into the groove (11).

36. A cylinder (01) in accordance with claim 1 or 6, or a printing unit in accordance with claim 14, characterized in that the actuator (26) has a head element (27) and a base element (28), wherein the base element (28) is rigidly connected with the groove (11), and the head element (28)

exerts a force directly on the holding device, which moves the holding device.

37. A cylinder (01) in accordance with claim 1 or 12, or a printing unit in accordance with claim 13, characterized in that the holding device consists at least of a holding element (18) and a spring element (19).

38. A cylinder (01) or a printing unit in accordance with claim 37, characterized in that the holding element (18) is embodied as a clamping piece (18).

39. A cylinder (01) or a printing unit in accordance with claim 37, characterized in that the holding element (18) is embodied as a registration pin.

40. A cylinder (01) in accordance with claim 1 or 12, or a printing unit in accordance with claim 13, characterized in that the holding device is arranged in a base body (22) arranged in the groove (11), and the actuator (26) displaces the base body (22).

41. A cylinder (01) in accordance with claim 1, 6 or 40, or a printing unit in accordance with claim 14 or 32, characterized in that a plurality of actuators (26) is arranged in series in the groove (11), wherein the actuator (26), which is located the farthest from the holding device to be displaced, or from the base body (22) to be displaced, is rigidly connected with the groove (11), and wherein the remaining actuators (26) are each rigidly connected with each

other, so that in the course of the simultaneous application of a control signal (US) to several actuators (26) the actuating paths (s) of the latter are added together.